

## HUNTINGS ROLE IN WETLAND CONSERVATION EFFORTS

### 7th-10th Grade Discussion Guide

*Developed by: Joseph Kanke*

#### SCIENCE CATEGORIES

Conservation, Wildlife Science

#### TIMEFRAME

Two to three 60 minute class periods

#### MATERIALS

Paper and writing materials or computer

#### KEY WORDS

North American Management Wildlife Plan, waterfowl, wetlands, silhouette, plumage, state managed game production area



## LEARNING OBJECTIVES

Students will be able to:

- explain the similarities and differences between the two tiered system for hunting ducks and why it may be attractive to hunters new to the sport.
- understand how hunting funds conservation efforts to protect wetlands.
- write short explanatory compare/contrast text
- interact with informative text through collaborative written dialogue

## ACTIVITY SUMMARY

This lesson explores the role that hunters play in management and conservation efforts; especially of wetlands. Students will explore a new tiered system for duck hunting introduced in South Dakota meant to attract new hunters. They will also consider how hunting provides funds to wetland conservation efforts.

The whole class will collaboratively develop an anchor chart comparing the two tiers of duck hunting in South Dakota before writing short explanatory compare/contrast pieces and soliciting peer feedback.

Then students will read an informative text which outlines how hunting plays a role in funding and population management. Following the reading activity, students will interact with the text with a partner using dialogue journaling. Finally, partners will consider new approaches to attract hunters to the sport.



## VOCABULARY

**NORTH AMERICAN MANAGEMENT WILDLIFE PLAN** – a cooperative plan managing both waterfowl and wetlands habitats across North America.

**WATERFOWL** - a bird that frequents water especially a swimming game bird (such as a duck or goose)

**WETLANDS** - areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season

**SILHOUETTE** – the dark shape and outline of someone or something visible against a lighter background, especially in dim light.

**PLUMAGE** – all of the feathers of a bird

**STATE MANAGED GAME PRODUCTION AREA** – state-owned lands managed specifically for hunting

## BACKGROUND INFORMATION

The North American Waterfowl Management Plan (NAWMP) is a cooperative plan managing both waterfowl and wetlands habitats across North America. This plan was established because beginning with the European settlement, wetlands were developed resulting in the loss of 53% of wetlands by 1985 and causing waterfowl populations to plummet. NAWMP was signed into existence in 1986 protecting the development of remaining wetlands.

Another consideration of the plan is monitoring hunter populations. The number of hunters has decreased since the 1990s. Part of this decline stems from the requirement to be able to identify the waterfowl before you hunt. Identifying features include size, silhouette and flock size. Since this can be difficult to do when a bird is flying, some hunters don't even want to try duck hunting. With less people going into the sport, there is less money for conservation.

Taxes from licenses, hunting guns and ammunition all generate money to preserve state managed wetlands. In an attempt to bring new hunters to the sport, South Dakota has recently implemented a two tiered system for hunting. Tier 1 continues the traditional approach which has limits on species and sex restrictions. Tier 2 allows for a smaller harvest number but doesn't carry limitations. This relieves the pressure of needing to know the birds in order to hunt. As part of the management plan, those hunters choosing Tier 2 are required to send in the wings of their birds to provide population data.



## LEARNING PROCEDURE

### INTRODUCTION:

Collaboratively develop a T-chart with the left side labeled Tier 1 and the right side Tier 2. Compare and contrast the different requirements under each of the Tiers. Lead the class in a discussion on the following two questions:

Why did South Dakota choose to add the second tier option?

Why are the hunters required to send wings in under the second tier?

### ACTIVITY 1:

Using the anchor chart as a scaffold to learning, task students (dyads or triads) with writing a short explanatory compare/contrast piece. Explain that they will be writing for an audience who has never been hunting before and will need to provide information on each of the two tiers and how they are similar and different.

- like
- similar to
- unlike
- similarly
- in the same way
- likewise
- compared to
- in contrast
- conversely
- at the same time
- on the one hand ... on the other hand.

When complete, instruct dyads/triads to exchange their process piece with another partner and pose the question:

If you had never been hunting waterfowl before, would this compare/contrast piece provide enough information for you to make an informed decision about which tier best matched your needs?

Provide sticky notes for groups to offer feedback. You may want to consider providing feedback stems:

- I think the best thing about your work is...
- I really like the way you...
- Think about adding. . .
- To improve you could. . .
- I need to hear more about. . .

## ACTIVITY 2:

Invite students to read the text [The Role of Hunting in Wildlife Conservation Explained](#). Students should be reminded to interact with the text in whichever method they have previously been instructed and/or are comfortable with (post-it notes, journaling, markup the text). Instruct students to search for textual evidence that speaks to the following three questions: v

1. How does hunting fund conservation efforts?
2. How does hunting play a role in managing wildlife populations?
3. How does hunting waterfowl aid the conservation of wetlands?

After students have read and interacted with the text individually, they will need a partner to participate in three rounds of dialogue journals, one for each of the above questions.

This is a great paired activity that requires students to use questioning skills.

## THE SETUP

1. Students must be given a guiding question to get the conversation started.
2. Tell students that they will be having a conversation with a partner, but the entire conversation must take place through writing. This is a silent activity.
3. Each student should use a different color writing utensil to distinguish the dialogue.
4. Set a time limit.
5. Students pass the paper back and forth asking and answering questions.





## CONCLUSION:

Say: "The Tier 2 addition to South Dakota's duck hunting season was one attempt to bring more hunters to the sport. What are some other ideas for attracting new hunters?"

Provide partners an opportunity to generate ideas and choose the one they consider their best to share with the whole class.

## EXTENDING THE LESSON (OPTIONS FOR EXTENDED/ADDITIONAL ACTIVITIES AND LESSONS)

- Write interview questions and reach out to someone in the Department of Natural Resources to answer any lingering questions you still have regarding hunting and conservation efforts.
- Research a wetland conservation site in your town, county or state. Be sure to include any information you find on how the conservation is funded.
- Create a mathematical table that indicates the maximum carrying capacity of a species for a given area and the desired harvest population (hunting) required to maintain a healthy population.
- Develop a third tier to the two-tiered system. Ensure that it takes into consideration both attracting hunters to the sport and conservation. Explain your reasoning.
- Is there a low-lying area on your school grounds? How might you foster a wetland habitat?

## RELATED LINKS

- [About the Three-Duck Limit](http://gfp.sd.gov/three-duck-limit) (gfp.sd.gov/three-duck-limit)
- [Habitat/Duck Stamp FAQs](http://gfp.sd.gov/userdocs/docs/2021_habitat_stamp.pdf) (gfp.sd.gov/userdocs/docs/2021\_habitat\_stamp.pdf)
- [Login to purchase a SD hunting license](http://license.gooutdoorsouthdakota.com/Licensing/CustomLookup.aspx) (license.gooutdoorsouthdakota.com/Licensing/CustomLookup.aspx)
- [Types of licenses in SD](http://gfp.sd.gov/license-types) (gfp.sd.gov/license-types)
- [Duck hunting general info \(banding data, season dates, limits, zones\)](http://gfp.sd.gov/ducks) (gfp.sd.gov/ducks)
- [Youth Duck Hunt](http://gfp.sd.gov/youth-waterfowl) (gfp.sd.gov/youth-waterfowl)
- [Hunter Education](http://gfp.sd.gov/youth-waterfowl) (gfp.sd.gov/youth-waterfowl)
- [Waterfowl Harvest Reports and Surveys](http://gfp.sd.gov/hunt-surveys) (gfp.sd.gov/hunt-surveys)
- [2021 Hunting Handbook \(30-35 Waterfowl\)](http://gfp.sd.gov/userdocs/docs/2021_huntingandtrappinghandbook_flip.pdf) (gfp.sd.gov/userdocs/docs/2021\_huntingandtrappinghandbook\_flip.pdf)



The following National Common Core Standards can be met teaching;

## HUNTINGS ROLE IN WETLAND CONSERVATION EFFORTS

### 7TH GRADE:

- CCSS.ELA-LITERACY.RI.7.1** Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- CCSS.ELA-LITERACY.RI.7.2** Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
- CCSS.ELA-LITERACY.W.7.2** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
- CCSS.ELA-LITERACY.W.7.2.C** Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.
- CCSS.ELA-LITERACY.W.7.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
- CCSS.ELA-LITERACY.W.7.5** With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well the purpose and audience have been addressed.
- CCSS.ELA-LITERACY.SL.7.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
- CCSS.ELA-LITERACY.SL.7.1.A** Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- CCSS.ELA-LITERACY.SL.7.1.B** Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.
- CCSS.ELA-LITERACY.SL.7.1.C** Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
- CCSS.ELA-LITERACY.SL.7.1.D** Acknowledge new information expressed by others and, when warranted, modify their own views.

### 8TH GRADE:

- CCSS.ELA-LITERACY.RI.8.1** Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- CCSS.ELA-LITERACY.RI.8.2** Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
- CCSS.ELA-LITERACY.RI.8.3** Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).



**CCSS.ELA-LITERACY.W.8.2**

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

**CCSS.ELA-LITERACY.W.8.2.C**

Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concept

**CCSS.ELA-LITERACY.W.8.4**

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**CCSS.ELA-LITERACY.W.8.5**

With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well the purpose and audience have been addressed.

**CCSS.ELA-LITERACY.SL.8.1**

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**CCSS.ELA-LITERACY.SL.8.1.A**

Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

**CCSS.ELA-LITERACY.SL.8.1.B**

Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.

**CCSS.ELA-LITERACY.SL.8.1.C**

Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.

**CCSS.ELA-LITERACY.SL.8.1.D**

Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

## 9TH-10TH GRADE:

**CCSS.ELA-LITERACY.RI.9-10.1**

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

**CCSS.ELA-LITERACY.RI.9-10.2**

Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

**CCSS.ELA-LITERACY.RI.9-10.3**

Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.

**CCSS.ELA-LITERACY.W.9-10.2**

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

**CCSS.ELA-LITERACY.W.9-10.2.C**

Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.

**CCSS.ELA-LITERACY.W.9-10.4**

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**CCSS.ELA-LITERACY.W.9-10.5**

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

**CCSS.ELA-LITERACY.SL.9-10.1**

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.



- CCSS.ELA-LITERACY.SL.9-10.1.A** Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
- CCSS.ELA-LITERACY.SL.9-10.1.B** Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed.
- CCSS.ELA-LITERACY.SL.9-10.1.C** Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.
- CCSS.ELA-LITERACY.SL.9-10.1.D** Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.

## NEXT GENERATION SCIENCE STANDARDS:

- MS-LS2-1** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- MS-LS2-4** An argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
- MS-LS2-5** Ecosystems: Interactions, Energy, and Dynamics Evaluate competing design solutions for maintaining biodiversity and ecosystem services.